(12/2/2008) Abbot Stevenson - OVCC

Page 1

From:

Tim Campbell

To:

George Elmaraghy

CC:

Abbot Stevenson

Date:

04/10/08 11:17 AM

Subject:

OVCC

Attachments: oepa letter.PDF

## George,

Attached is the response that we received from Ohio Valley. They acknowledged the release and provided their sample results which indicate there was a TSS violation. In addition to this violation (and the free-from violation), they failed to monitor the discharge from the slurry impoundment during the months of January and February.

Abbot talked to Ken Mettler, our OSI investigator, yesterday and they are still pursuing the case. We intend to get the referral to CO in the near future. If you need anything else, please call.

Tim



March 31, 2008

Ms. Abbot Stevenson Environmental Engineer OEPA – SEDO 2195 Front Street Logan, OH 43138

Dear Ms. Stevenson:

We are in receipt of your letter of March 21, 2008 requesting additional information. The initial telephone report was followed, per the permit, with a written report that addressed some of the questions in your letter about the circumstances of the discharge of effluent containing slurry. In response to your questions, we have the following responses:

A.

- 1. As explained previously, the discharge occurred sometime before it was discovered around 8:30 a.m. on February 28. The last time the effluent was checked and was clear was around 2:30 p.m. on February 27.
- 2. As provided in the NPDES report for February, we estimate that approximately 216,000 gallons were pumped from midnight February 27 to 8:30 a.m. on February 28. Since it is unclear when the slurry shifted, it is impossible to arrive at a more exact estimate of the flow.
- 3. To better explain the cause of the discharge, it is necessary to explain the new decant system. The new decant is different than the old decant system. The old system basically was a square box with tongue-and-groove stop logs that were used to raise the level of the impoundment. This box was located on the west side of the impoundment where access to the decant system was relatively easy along the shore. The new decant is a pipe that must be raised by welding new sections to the end of the pipe in the impoundment. Therefore, the flow of water cannot be stopped quickly like the old decant system. It is necessary to maintain the level of the water below the top of the decant pipe by pumping into it. The end of the pipe is about 8-10 ft from the shore line. The new decant system is designed to pump into it from the clear water in the impoundment. This works well with the design approved by the federal Mine Safety and Health Administration. To limit seepage of water through the embankment, we will eventually place slurry near the dam and pump water to the decant pipe from the back of the impoundment.

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Pumping to the decant pipe began on February 7 because high amounts of rainfall and snow melt had contributed to a rise in the level in the impoundment faster than anticipated. In addition, normal pumping from the impoundment to the Century Mine Preparation Plant was stopped for about a week (February 20 through 27) due to a problem with their pump. Pumping also occurred on three days in January, also to keep the level of water below the end of the decant pipe. According to Mr. Don Meadows, Plant Superintendent, the effluent had been clear of any slurry until the incident on February 28.

We believe that sometime on the morning of February 28, slurry shifted in the impoundment. The slurry came into contact with the suction hose for the pump, which was located near the new decant pipe, and slurry was inadvertently pumped into the decant pipe. Water in the location of the suction line had been clear of slurry prior to February 28. On February 28, when the pumping was stopped, slurry was observed near the new decant pipe where it had not existed previously, leading to the conclusion that the slurry had shifted during the night.

- 4. To our knowledge the following people discovered the discharge on February 28 and, therefore, have knowledge of the circumstances of the discharge: Mr. Fred Blumling, Project Engineer, who notified Don Meadows, Plant Superintendent, that morning that the creek appeared to be dark; and me.
- 5. Immediately after the discharge was discovered, the pump was turned off. In the days following the discharge, slurry that remained in the ditches leading to (Outfall 001) was removed to prevent a recurrence when pumping resumes. A dike was placed around the decant pipe to prevent water from discharging over the end of the pipe. In addition, the flow monitor and sampler have been re-installed. See item B.4. for additional information.
- 6. Mr. Don Meadows was in charge of this effort.
- B.
- 1. The limitation that was exceeded was total suspended solids. The limit is 70 mg/l on a daily basis, and 35 mg/l on a monthly basis. On February 28, a sample was taken downstream of the outfall in Captina Creek. The attached analysis sheet shows the result of the sample.
- 2. See enclosed analysis.
- 3. The cause of the exceedance based on information we have to date was that slurry shifted and was inadvertently pumped down the decant pipe.
- 4. In order to prevent a recurrence, pumping to the decant pipe will only occur in daylight hours when the effluent can be monitored by observation. If necessary, additional pumps will be added so pumping to the decant pipe during non-daylight hours will not be necessary. The pump(s) used to pump to the decant pipe will be

located where there is a minimum of three (3) ft of water over the slurry. During inspections of the pumping system, measurements will be made of the amount of water over the slurry in the location of the decant pump. Training will be given to personnel who work around the pump and decant so they know the proper procedures for: 1.) Checking the discharge and the amount of water over the slurry, and 2.) Stopping the pumping if necessary. A device called a "sludge judge" will be used to determine the amount of water over the slurry by obtaining a sample of the column of water and slurry under the pump suction. These inspections will occur on all three shifts every day that pumping to the decant pipe occurs. Currently, there is 7 ft of water above the slurry at the new pump location. The pump is on a float near the face of the dam. This pump float is 50 ft from the main embankment, where the measurement was taken.

In order to maintain clear water at the pump location, the slurry discharge is maintained at least 1500 ft from the pump. At this time, the amount of clear water over the slurry ranges from 7 ft at the pump, to 0 ft, at a point 700 ft from the main embankment in the middle of the impoundment. Slurry is deposited between 2000 and 3000 ft from the pump location. Flocculant is added to the slurry at the preparation plants to aid in settling in the impoundment.

If you have any questions, please contact me.

Sincerely,

THE OHIO VALLEY COAL COMPANY

David L. Bartsch, P.E.

**Environmental Coordinator and** 

Permit Administrator

cc:

D. Meadows

K. Hughes

M. McKown

K. Brinkman

R. Schmidt

File



## Tra-De

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17-Mar-08

## LABORATORY ANALYSES

Ohio Valley Coal Company 56854 Pleasant Ridge Road Alledonia, OH 43902 Attn: Mr. David Bartsch

Company:

Ohio Valley Coal Company

1.0

mg/L

Source:

Nitrate

Captina

Analysis Number:

0802367

Sample Type:

Sampled By:

QES (ZC)

Date & Time Sampled: Date & Time Received: 02-28-08

0.03

[3]

mg/L

Special Quarterly

1038 02-28-08 1530

Field pH, S.U. 7.9 S.U. PARAMETER CONCENTRATION DATE & TIME **ANALYST METHOD** MDL **ANALYZED** 7.82 S.U. 02-28-08 1720 WB 4500HB pH, Lab [2] Total Acidity (as CaCO<sub>3</sub>) 0.72 03-03-08 1430 WB 2310B(4) [2] 0.16 mg/L mg/L Total Alkalinity (as CaCO3) 98 mg/L 03-03-08 1100 WB 2320B [2] 0.13 mg/L 0.01 mg/L 2.8 03-05-08 1341 BS 3111B [1] **Total Iron** mg/L 0.002 mg/L Total Manganese 0.049 03-05-08 1341 BS 3111B [1] mg/L **Total Suspended Solids** 02-29-08 1600 WB 2540D [2] 0.87 mg/L 160 mg/L mg/L Hardness (as CaCO<sub>3</sub>) 140 mg/L 03-13-08 1230 MY 2340 C [1] 5.0 mg/L Sulfate (as SO<sub>4</sub>) 03-13-08 1220 LW D516-02 [4] 0.65 66 mg/L µmhos/cm 0.70 Specific Conductance 440 µmhos/cm 03-07-08 0830 LW 120.1 [3]

02-28-08 1540

LW

352.1

MDL: Method Detection Limit

[1] Standard Methods, 18th Edition [2] Standard Methods, 20th Edition [3] US EPA [4] ASTM [5] EPA SW846